

REMARKS

Reconsideration of this application in light of the present amendment and remarks is respectfully requested.

Claims 1-25 have been rejected.

Claims 1, 8-10, 15 and 20-25 have been canceled, without prejudice.

Claims 2-4, 6, 11-12, 14 and 16-19 have been amended.

Claims 2-7, 11-14 and 16-19 are pending in this application.

Claim 1 has been rejected under 35 U.S.C. §102(e) as being anticipated by Laakso et al. (US 2003/0099209, hereinafter "Laakso").

Claim 1 has been canceled thereby rendering this rejection moot.

Claims 2-3, 16-19 and 22-25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Laakso in view of Tiedemann, Jr. et al. (US 2004/0258024, hereinafter "Tiedemann"). This rejection is respectfully traversed.

Claims 2-3 have been amended to remove the recitation of having additional bits. Therefore, applicant respectfully submits that Tiedemann is no longer applicable. In addition, claims 2-3 have been amended to depend from amended claim 4, incorporated by reference, and which will be distinguished below.

Laakso does not suggest that the actual power levels or even the difference in power levels is dependent upon data rate. Instead, Laakso describes power levels with respect to other power levels, interference levels, or quality levels (page 2 [0016]), but not data rate. However, Laakso does describe an added reliability margin for the difference in transmit powers between fields, wherein the reliability margin can be dependent upon the data rate (page 5 [0046] and page 7 [0057]). In any event, Laakso is missing applicant's element (in associated base claim 4) of splitting the pilot field into two groups. Therefore, Laakso could not have envisioned making one group data rate dependent and making the other group data rate independent.

Claims 16-19 have been amended to depend from amended claim 4, incorporated by reference, and which will be distinguished below. Moreover, applicant respectfully submits that Tiedemann does not disclose a plurality of thresholds, but instead discloses only one threshold, z (page 7 [0067]). Therefore, since Laakso in view of Tiedemann does not suggest or disclose the plural thresholds of amended claim 16, then these references could not have envisioned the multiple control commands of claim 17 relative to these thresholds, nor could they have envisioned the division of levels into ranges (areas) defined by the plural thresholds of claim 18,

nor could they have envisioned the adjustment of levels dependent upon the power level areas and relative position thereto of claim 19.

Therefore, applicant respectfully submits that claims 2-3 and 16-19 are novel and non-obvious over Laakso in view of Tiedemann.

Claims 22-25 have been canceled.

Applicant respectfully requests that this rejection be withdrawn.

Claims 20-21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Laakso in view of Tiedemann and further in view of Yun et al. (US 2005/0111521).

Claims 20-21 have been canceled thereby rendering this rejection moot.

Claims 4 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Laakso in view of Ponnekanti (US 2002/0150065). This rejection is respectfully traversed.

Independent claims 4 and 14 have been amended to reflect that a set of pilot bits of a message are divided into two groups (i.e. one group for channel estimation and one group for power control), wherein the power level of one group of bits is dependent upon data rate and the power level of the other group of bits is independent of data rate. Support for this can be found in the text on page 7 lines 33-4, page 8 lines 4-20, and Fig. 4. The combination of recitations in the amended claims are not disclosed or suggested in any of the cited references.

Advantageously, applicant's invention provides pilot bits for channel estimation which are transmitted at a higher power when the data rate on the associated traffic channel (DPDCH) is high and are transmitted at a lower power (or even at zero power, which is referred to as discontinuous transmission DTX) when the data rate on the associated traffic channel (DPDCH) is low, thereby reducing interference. Moreover, the node B is able to apply the power control process consistently irrespective of the data rate being used for the associated traffic channel (DPDCH), which may change from sub-frame to sub-frame, because the power control bit group is transmitted at a power level determined by a constant irrespective of the data rate being used on the associated traffic channel (DPDCH).

Laakso discloses controlling a transmit power of the entire pilot field of a message (page 3 [0027]), wherein the transmit power of the pilot field can be different from the transmit power of the other control or data fields (page 2 [0010]). The Examiner admits that Laakso does not suggest or disclose the elements of splitting of the pilot field into two groups of bits, one of which has a power level that is dependent upon data rate and the other of which has a power level that is independent of data rate.

Ponnekanti discloses a message containing pilot bits and additional, separate power control bits. Applicant submits that this is different and less efficient than splitting the pilot bits

into two groups, one of which is used for power control. Moreover, although page 8 [0149] does describe power control bits and channel estimation bits, these are not all pilot bits, and applicant respectfully submits that this reference does not describe or suggest that a power level of the power control bits is independent of data rate and a power level of the channel estimation bits are dependent on data rate.

Inasmuch as both of these references are missing applicant's element of splitting the pilot field into two groups, neither of the references, in combination or alone, could have envisioned making one group data rate dependent and making the other group data rate independent.

Therefore, applicant respectfully submits that amended independent claims 4 and 14 are patentable and non-obvious over the cited art.

Applicant respectfully requests that this rejection be withdrawn.

Claims 5-7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Laakso in view of Ponnekanti and further in view of Yun et al. (US 2005/0111521).

Claims 5-7 are dependent on amended claim 4, hereby incorporated by reference, and are therefore deemed allowable as well for the same reasons.

Applicant respectfully requests that this rejection be withdrawn.

Claims 8, 10-13 and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ponnekanti and further in view of Yun et al. (US 2005/0111521).

Claims 8, 10 and 15 have been canceled.

Claims 11-13 have been amended to depend from amended claims 4, hereby incorporated by reference, and are therefore deemed allowable as well for the same reasons.

Applicant respectfully requests that this rejection be withdrawn.

Claim 9 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ponnekanti and further in view of Yun et al. (US 2005/0111521) and further in view of Tiedemann.

Claim 9 has been canceled, thereby rendering this rejection moot.

The other references of record have been reviewed and applicant's invention is deemed patentably distinct and nonobvious over each taken alone or in combination.

For the foregoing reasons, applicants respectfully request that the above rejections be withdrawn.

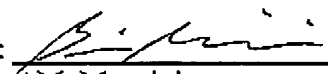
Inasmuch as this amendment distinguishes all of the applicants' claims over the prior art references, for the many reasons indicated above, passing of this case is now believed to be in order. A Notice of Allowance is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Authorization is hereby given to charge any fees necessitated by actions taken herein to Deposit Account 50-2117.

Respectfully submitted,
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